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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,336	07/18/2003	Dinesh Katiyar	EPI-019-1C US 7034323001	4851
7590 10/18/2005			EXAMINER TO, JENNIFER N	
Jeffrey S. Smith Bingham McCutchen LLP 18th Floor Three Embarcadero Center San Francisco, CA 94111			ART UNIT 2195	
DATE MAILED: 10/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/622,336

Applicant(s)

KATIYAR ET AL.

Examiner

Jennifer N. To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17,20-22,31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17,20-22,31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-17, 20-22, and 31-32 are presented for examination.

***Claim Objections***

2. Claims 8-9, and 32 are objected to because of the following informalities:  
the phrase "the form of" should be "a form of". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter in which the applicant regards as his invention.
4. Claims 1-17, 20-22, and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. The following terms lacks antecedent basis:
    - i. the location – claim 5;
    - ii. the unique identifier – claim 5;
    - iii. multiple additional consumer processes – claim 22;
  - b. The claim language in the following claims is not clearly understood:
    - i. as per claim 1, lines 6-7, it is not clearly understood what is the purpose of "a consumer process executes on a second processor accessing a second storage device" (i.e. accessing a second storage device for information object). Lines 11-12, it is

uncertain when is the step of "sending the information object across the network to the consumer process" performed (i.e. in response to a request or automatically). Lines 17-18, it is uncertain when is the step of "using the provider process to modify one or more of the attributes of the information object" performed (i.e. before or after transferring information object to the consumer process).

ii. as per claim 5, lines 3-4, it is uncertain what is "the attributes" refer to (i.e. plurality of attributes or the modified attributes).

iii. as per claim 10, it is not clearly understood what is meant by "a robot process" (i.e. automatic process).

iv. as per claim 20, lines 11-12, it is not clearly understood how is the step of "using the consumer process to access the information object" performed (i.e. through second storage device or first storage device).

v. as per claim 31, it is uncertain how is the step of "transferring at least a portion of each identified information objects from the internet to the first computer" (i.e. base on what standard or criteria).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17, 20-22, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. (hereafter Reed) (U.S. Patent No. 6044205).

3. As per claim 1, Reed teaches the invention substantially as claim including a method for transferring a communication object across a network (abstract, lines 1-15; col. 6, lines 6-22), wherein the communication object resides on a first storage device accessed by a provider process executing on a first processor, wherein the communication objects comprises a plurality of attributes, wherein each attribute contains information, wherein consumer process executes on a second processor accessing a second storage device (figs. 1-3; col. 8, lines 32-48; col. 9, lines 17-24; col. 12, lines 39-67; col. 13, lines 1-56; col. 14, line 29; col. 16, lines 55-57), the method comprising:

    sending the communication object across the network to the consumer process (col. 20, lines 11-23; col. 28, lines 43-44);

    storing the communication object in the second storage device as a second instance of the communication object (figs. 1 & 7; col. 9, lines 17-24);

    using the provider process to modify one or more of the attributes of the communication object (figs. 12 & 13A-13B; col. 21, lines 10-16; col. 27, lines 47-67; col. 28, lines 1-28), an amount of information contained by the one or more

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modified attributes being less than an amount of information contained by the communication object (col. 15, lines 21-39);

sending the one or more modified attributes of the communication object across the network to the consumer process (col. 28, lines 41-44); and

synchronizing the second instance of the communication object based on the one or more modified attributes (col. 28, lines 44-56; col. 39, lines 16-45).

Reed did not specifically teach information object.

4. However, Reed teaches communication object (col. 16, lines 55).

5. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have recognized that Reed teaching of communication object is functional equivalent to information object because both of these objects served as the container for processing information across the network. Therefore, one would be motivated to allow providers and consumers to quickly and easily establish an automated communications relationship, simplify the transfer and storage of information between both parties, provide a common frame of reference for the automated filtering and processing of information, and flexibly adapt to the multiple communications networks or systems that may be in use by either the provider or consumer (Reed, col. 5, lines 63-67; col. 6, lines 1-3).

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6. As per claim 2, Reed teaches that wherein the communication object is a data object (col. 6, lines 50-61).
7. As per claim 3, Reed teaches that wherein the communication object is a data definition (col. 13, lines 57-60).
8. As per claim 4, Reed teaches that wherein the communication object is an algorithm (col. 13, lines 60-67; col. 14, lines 1-28).
9. As per claim 5, Reed further teaches:
  - using the consumer process to formulate a relational criterion based on the attributes of the communication object (fig. 14; col. 16, lines 30-53; col. 29, lines 20-67; col. 30, lines 1-67);
  - using the consumer process to submit a request to the provider process (col. 11, lines 34-35) by performing:
    - providing the location of the consumer process within the network (col. 11, line 67; col. 12, lines 1-11),
    - providing the unique identifier associated with the communication object (col. 25, lines 42-54), and
    - providing the relational criterion to the provider process (col. 16, lines 36-40);
  - using the provider process to detect when a change in the attributes of the communication object satisfies the relational criterion (col. 7, lines 10-15); and

in response to the change in the attributes of the communication object, transferring information about the changes attributes across the network and updating the second instance on the second storage device in accordance with the information about the changed attributes (fig. 16; col. 38, lines 21-36).

10. As per claim 6, Reed teaches that wherein the communication object is stored in a storage device local to the processor executing the provider process (fig. 1).

11. As per claim 7, Reed further teaches the step of using the provider process to create the communication object (fig. 11; col. 22, lines 9-10).

12. As per claim 8, Reed teaches that wherein a server process is used to control modifications to the communication object (col. 11, lines 1-67; col. 12, lines 1-37), the method further comprising:

receiving modification requests at the server process in the form of add/update/delete instructions (col. 21, lines 46-62);

using the server process to modify the communication object in accordance with the received requests (col. 22, lines 8-67; col. 23, lines 1-16);  
and

using the server process to transmit information on modifications to the communication object (col. 24, lines 25-52).



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13. As per claim 9, Reed teaches that wherein a server process is used to control requests of the consumer process (col. 24, lines 54-67; col. 25, lines 1-7), the method further comprising:

receiving consumer requests at the server process in the form of publish/subscribe/edit operations (fig. 3; col. 25, lines 8-21, 40-41; col. 27, lines 28-46)

in response to a publish operation request, using the server process to create a new instance of the communication object (col. 25, lines 35-67; col. 26, lines 1-8);

in response to a subscribe operation request, using the server process to cause information on modifications to the communication object to update the second instance of the communication object on the second storage device (col. 27, lines 28-46); and

in response to edit operations, using the server process to modify the communication object (col. 27, lines 47-61).

14. As per claim 10, Reed teaches that wherein robot processes execute on one or more processors (abstract, lines 4-18), the method further comprising:

executing a robot process in response to a publish operation to perform a function on an instance of the communication object (col. 25, lines 8-41).

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15. As per claim 11, Reed teaches that wherein multiple instances of the communication object exist in multiple storage devices (fig. 1), the method further comprising:

using a server process to prevent one or more of the multiple instances from being synchronized (col. 38, lines 1-20).

16. As per claim 12, Reed teaches that each attribute comprises one or more name/value pairs, each name/value pair comprises a name and a value (col. 26, lines 44-67; col. 27, lines 1-10), the method further comprising:

formulating a relational criterion based on one or more names of the name/value pairs (col. 27, lines 11-27).

17. As per claim 13, Reed teaches that each attribute comprises one or more name/value pairs, each name/value pair comprises a name and a value (col. 26, lines 44-67; col. 27, lines 1-10), the method further comprising:

formulating a relational criterion based on one or more values of the name/value pairs (col. 27, lines 11-27).

18. As per claim 14, Reed teaches:

the network is a client-server arrangement (fig.1); and

sending the one or more modified attributes of the communication object across the network to the consumer process (abstract, lines 1-15; col. 6, lines 6-22) comprises:

transferring the information in a series of multiple store-and-forward operations (col. 40, lines 18-58).

19. As per claim 15, Reed teaches wherein the network is the Internet using Internet Protocol for information transmissions (col. 11, lines 2-33).

20. As per claim 16, Reed teaches wherein identification of communication objects uses an identifier that includes a Uniform Resource Locator as standardized on the Internet (col. 11, lines 12-33).

21. As per claim 17, Reed teaches:

the communication object is associated with a data definition defining the class of the communication object (col. 13, lines 29-46); and

each instance of the communication object is an instance of the defined class (col. 13, lines 47-56).

22. As per claim 20, Reed teaches the invention substantially as claim including a method for synchronizing a data definition of a communication object across a network, wherein a plurality of processors and storage devices are coupled to the network, wherein the data definition resides on a first storage device accessed by a provider process executing on a first processor, wherein the data definition has one or more attributes, wherein a data object associated with the data definition resides in a second storage device accessed by a

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consumer process executing on a second processor (figs. 1-3; abstract, lines 1-15; col. 6, lines 6-22; col. 8, lines 32-48; col. 9, lines 17-24; col. 12, lines 39-67; col. 13, lines 1-56; col. 14, line 29; col. 16, lines 55-57 ), the method comprising:

using the provider process to change at least one attribute of the data definition (figs. 12 & 13A-13B; col. 21, lines 10-16; col. 27, lines 47-67; col. 28, lines 1-28);

propagating at least one of the changed attributes of the data definition across the network (col. 28, lines 41-44); and

using the consumer process to access the communication object according to at least one of the changed attributes of the data definition (col. 28, lines 44-56; col. 39, lines 16-45).

Reed did not specifically teach information object.

23. However, Reed teaches communication object (col. 16, lines 55).

24. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have recognized that Reed teaching of communication object is functional equivalent to information object because both of these objects served as the container for processing information across the network. Therefore, one would be motivated to allow providers and consumers to quickly and easily establish an automated communications relationship, simplify the transfer and storage of information between both parties, provide a

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common frame of reference for the automated filtering and processing of information, and flexibly adapt to the multiple communications networks or systems that may be in use by either the provider or consumer (Reed, col. 5, lines 63-67; col. 6, lines 1-3).

25. As per claim 21, Reed further teaches:

assigning a unique identifier to the data definition by changing at least one of the attributes of the data definition to associated the data definition with a storage place on the first storage device (col. 18, lines 1-67; col. 19, lines 1-67; col. 20, lines 1-3); and

propagating at least one of the changed attributes of the data definition across the network by propagating the unique identifier (col. 20, lines 5-67; col. 1-5).

26. As per claim 22, Reed teaches that wherein multiple additional consumer processes executing on multiple processors each access and store the data definition (col. 39, lines 15-45), the method further comprising:

using the consumer process to modify at least one of the changed attributes of the data definition to create a second changed data definition (col. 39, lines 60-67; col. 40, lines 1-16);

transferring the second changed data definition to the provider process (col. 40, lines 1-35); and

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using the provider process to propagate the second changed data definition to the additional consumer processes (col. 40, lines 36-58).

27. As per claim 31, Reed teaches the invention substantially as claim including a system for distributing communication objects over the internet, each communication object having a plurality of attributes, the system comprising a first computer coupled to the internet, wherein the first computer includes a user input device and a processor (figs. 1-3; abstract, lines 1-15; col. 6, lines 6-22; col. 8, lines 32-48; col. 9, lines 17-24; col. 12, lines 39-67; col. 13, lines 1-56; col. 14, line 29; col. 16, lines 55-57), the system comprising:

means for accepting signals from the user input device to specify a relational condition using one or more of the attributes (fig. 16; col. 11, lines 2-61);

means for using the processor to transfer an indication to the internet of the specified relational condition (col. 11, lines 61-67; col. 12, lines 1-6);

means for identifying one or more information objects satisfying the relational condition (col. 32, lines 9-44);

means for transferring at least a portion of each identified communication objects from the internet to the first computer (col. 43, lines 29-53; col. 44, lines 28-32); and

means for using the processor to receive at least a portion of each identified communication object (col. 45, lines 14-20).

Reed did not specifically teach information object.

28. However, Reed teaches communication object (col. 16, lines 55).

29. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have recognized that Reed teaching of communication object is functional equivalent to information object because both of these objects served as the container for processing information across the network. Therefore, one would be motivated to allow providers and consumers to quickly and easily establish an automated communications relationship, simplify the transfer and storage of information between both parties, provide a common frame of reference for the automated filtering and processing of information, and flexibly adapt to the multiple communications networks or systems that may be in use by either the provider or consumer (Reed, col. 5, lines 63-67; col. 6, lines 1-3).

30. As per claim 32, Reed teaches that wherein one or more attributes of each communication objects includes associated values, wherein the internet includes a server computer for receiving queries in the form of specified relational conditions and for comparing query conditions with communication objects that match the query conditions (col. 25, lines 7-41), the system further comprising:  
means for using the server computer to receive the specified relational condition (col. 25, lines 43-67; col. 26, lines 1-14);

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wherein said means for identifying comprises means for using the server computer to detect when at least one of the communication objects attributes and values satisfy the specified relational condition (col. 26, lines 15-27); and

wherein said means for transferring comprises means for transferring information to the processor to identify the detect communication objects (col.26, lines 28-67; col. 27, lines 1-9).

### ***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**D'Arlach et al. (U.S. Patent No. 6026433)** teaches a method for creating and editing a Website in a client server computer network using customizable templates.

**Schwartz et al. (U.S. Patent No. 5913032)** teaches a method for automatically distributing a particular shared data object through electronic mail.

**Rothfus et al. (U.S. Patent No. 6044372)** teaches a method for publishing information to a communication network and enabling subscription to such information.

**Goddard (U.S. Patent No. 6430591)** teaches a method for rendering electronic images.

**Krishnan (U.S. Patent No. 6366956)** teaches an information access monitor automatically creates "virtual bibliographies" which reflect topics of interest to the users of the system.



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32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 7AM- 4:30 PM, F 7AM- 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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